The Secrets of Framework 6 Proposals

Sean McCarthy (sean.mccarthy@hyperion.ie)

All over Europe researchers are preparing proposals for the European Union's Research and Development programme (known as Framework 6). Researchers start by studying the workprogrammes (scientific priorities) and then they study the documentation on CORDIS (www.cordis.lu) needed to submit the proposals. This documentation is very comprehensive. After 20 years of designing and implementing these programmes the European Commission has prepared a very complete set of guidelines and websites to support proposal writers. Some researchers seem to master these guidelines and procedures and other researchers have difficulty understanding what is expected in the proposals. This article presents some of the secrets of the European Union Framework programmes. It is based on the author's involvement in European Union R&D programmes since 1980 (and his involvement in over 150 proposals and 60 contracts).

The Players in European Union R&D Programmes

Before discussing the secrets of Framework 6 proposals it is first necessary to understand the background to these programmes and the main players involved. The Member States of the European Union first come together and they prepare a **Treaty**. This describes the areas where they wish to cooperate. These topics include Energy, Agriculture, Transport etc. Article 163 of the Treaty describes how the Member States will work together in Research and Development. Following this the Institutions of the European Union prepare **Policies**. Examples include Agricultural Policy, Enterprise Policy, Regional Policy and Social Policy. To implement these policies the European Union has two 'instruments'.- **Legislation** and **Funding** Programmes.

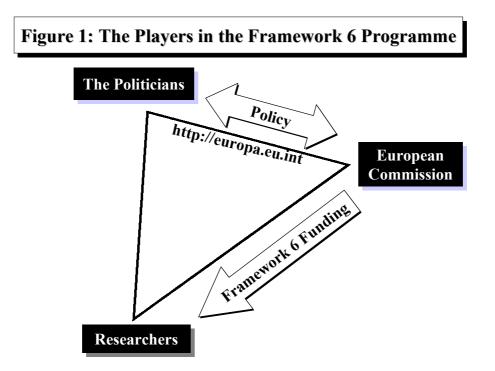


Figure 1 shows the relationship between the different players in Framework 6. Research Policy is first prepared between the Political Institutions (Council of Ministers and the European Parliament) and the European Commission (civil servants). When the policy is agreed the European Commission implements its Research Policy through the Framework 6 Programme. The important point here is that the topics in Framework 6 are political priorities. It is essential that researchers are familiar with these background documents before they start writing proposals. Examples of the background policies for the priorities in Framework 6 can be found on www.hyperion.ie/fp6websites.htm

Secret 1: You never go to Brussels looking for money for your research. You only go there to help the Europan Commission solve a problem that THEY have identified.

Your proposed research must be designed to solve European problems identified in European Union policies. For example the aim of the EU Information Technology Policy is to establish Europe as the world leader in Information Technologies by 2010. The European Commission has published an action plan titled the eEurope Action Plan. This is the background policy document for the Information Society Programme in Framework 6. In the Programme on Food Safety the background policy document is the White Paper on Food Safety.

Secret 2: Educate the Evaluator (with facts and figures)

Researchers must understand the difference between a Framework 6 proposal and a scientific paper. When a scientific paper is submitted to a journal the content of the document is scientific **only** and the paper is reviewed by scientific experts in the field. In the case of Framework 6 proposals the content is scientific, political, economic, social and it also has a comprehensive management section. The different evaluators will have scientific, economic and political backgrounds. It is essential that you educate all of the evaluators (with fact and figures) by answering very important questions (that are not in the proposal!).

- 1. Why bother? (i.e. what European problem are you trying to solve?)
- 2. Is it important at a European Level?
- 3. Why do you have to develop this? Is there a product or service already on the market?
- 4. Why now ? (Why did it have to wait until now?)
- 5. Could you transfer the technologies from another sector e.g. space
- 6. What background do you have that shows you have the skills to do this?

The following table is an example from a proposal that received 5/5 for economic relevance.

Performance Properties	Improvement
Tensile Strength	100-700%
Flexural Modulus	50-300%
Thermal Stability	30-80%
Gas Permeability Reduction	10-40%
Heat Release Rate Reduction	60-80%

Table 1: Improved Performance of Plastics with 3.5% Nano-additive Loading

One of the best training courses on Proposal Writing is to become an evaluator of Framework 6 proposals. To do this you first have to put your name and details of your expertise in the expert database on http://emmfp6.cordis.lu

Secret 3: Lobbying or Briefing?

Lobbying is an American concept. In Brussels it is better to describe the process as 'Briefing'. To understand the Lobbying (or briefing) process we refer to Figure 1. First someone must 'brief' the politicians on the importance of the research topic e.g. Food Safety. Someone must then 'brief' the European Commission to ensure that the specific research topics are included in the workprogramme of Framework 6. Eventually the scientists must be briefed on the political background to the priorities of Framework 6. This briefing process is done through Conferences /Evaluations /Assessments /Studies /High Level Groups / etc. The process is extremely transparent and the European Commission continuously advertises these activities on its Cordis News services (www.cordis.lu). It is important that researchers are involved in these activities as it gives them a thorough understanding of the background to the different topics in the programmes. It also means that when you are setting up a consortium it is important to have partners who have been active in this 'briefing' process. Examples of the 'Expert Groups' can be found on www.hyperion.ie/framework6websites.htm

Secret 4: From Framework 4 to Framework 5 to Framework 6

Framework 4 concentrated on the development of advanced science and technologies. e.g. The *Development of a Sensor to Monitor Hydrocarbons in Water*

Framework 5 focussed on developing scientific and technology solutions to important EU problems. e.g. *The Development of a Hydrocarbon Monitoring Sensor to assist water companies in meeting the requirements of the EU Water Framework Directive.*

Framework 6 involves bringing together the best scientists in Europe to solve big problems with technology. *The Development of Technical Platforms and Standards to improve the Quality of Drinking Water in Europe (in accordance with Water Framework Directive)*

In Framework 6 the single most important task in preparing a proposal is selecting the best possible partners. These would include scientists already active in EU R&D contracts, members of standards committees, members of EU 'expert panels'. The relevant websites can be found on www.hyperion.ie/framework6websites.htm

Secret 5: European Documentation for Research Proposals

Every question in the proposal has a history. The Framework 6 guidelines are very good at telling you **what** they want. They are not good at telling you **why** they want the information.

Background to the questions in the proposal. Again refer to figure 1. The European Commission is obliged by legislation to regularly report the progress of the Framework Programmes to the European Parliament. They do this through Annual Monitoring Reports (<u>http://www.cordis.lu/fp5/monitoring/</u>), 5-Year Assessment Reports (<u>http://www.cordis.lu/fp5/panels.htm</u>) and External Advisory Group Reports (<u>http://europa.eu.int/comm/research/fp5/eag.html</u>). In addition to this the European Commission has established a high level advisory group called EURAB (European Research Advisory Board) (<u>http://europa.eu.int/comm/research/eurab/index_en.html</u>) The recommendations of these 'Expert Groups' have to be implemented. This is why the rules change so often. Examples:

- *"The next Framework Programme must be firmly based on the twin pillars of scientific excellence and economic and social relevance"* 5-Year Assessment (1997)
- *"Relevance can be derived from forward-looking analysis of technologies (foresight studies). The role of the JRC IPTS (<u>www.jrc.es</u>) is worth examining in this connection. (5-Year Assessment (1997)*
- *"Impact assessment should become one of the most important elements of evaluation"* 5-Year Assessment (2000)

The above websites are essential reading for all proposal writers (and advisors) in Framework 6.

Secret 6: Focus on Deliverables, Users and Routes for Exploitation

Excellent science is the most important part of any Framework 6 proposal. However, this on its own is not enough. During the preparation of Framework 6 *Elly Plooij-Van Gorsel Member of the European Parliament said in an interview in European Parliament Magazine (February 2002) " Europe is very good at transferring euros into research, but not in transferring research into euros."*

In addition to excellent science the writer must address the following key issues: What exactly will come out of the proposed work i.e. the deliverables (prototypes, software, data, documents, databases, media...)?

Who will use these – or to be more specific who is the NEXT USER?

How will you deliver the results to these users – i.e. routes of exploitation (publications, licences, spin off company, education..)?

This in fact is how proposals for Framework 6 should be started. When this is defined then you can start designing the science.

Summary

The European Union provides funding for research to "strengthen the scientific and technological bases of Community industry and encourage it to become more competitive at international level, while promoting all the research activities deemed necessary by other Chapters of the Treaty." (Article 163 EU Treaty). The funds provide by the European Commission are public funds and there is a legal requirement on the European Commission to continuously monitor how these funds are used. They must also regularly adapt the workprogrammes and rules to reflect changes in new political, economic and social challenges. Researchers who rely on public funding for their research (National and EU) **MUST** become more aware of these issues and they must be able to address these non-scientific issues in the proposals. On a positive note researchers who are aware of the political, economic and social background to the Framework 6 Programme claim that it makes their research more interesting AND they get more contracts.

AUTHOR

Dr. Sean McCarthy (<u>sean.mccarthy@hyperion.ie</u>) is Managing Director of Hyperion Ltd. Hyperion specialises in the development of training course for research managers. Full details of their training courses can be found on <u>www.hyperion.ie</u>. Hyperion's clients can be seen on <u>www.hyperion.ie/clients.htm</u>